

FIG. 1 is a block diagram of a network system. The system includes a central communication medium 106, which is a cloud. Three Hewlett-Packard 9000 Computers are connected to the communication medium. The top-left computer contains a logical machine 102 and a client 104. The top-right computer contains a logical machine 102 and a client 104. The bottom computer contains a logical machine 102 and multiple clients 104, indicated by an ellipsis. Arrows show bidirectional communication between each logical machine and the communication medium.

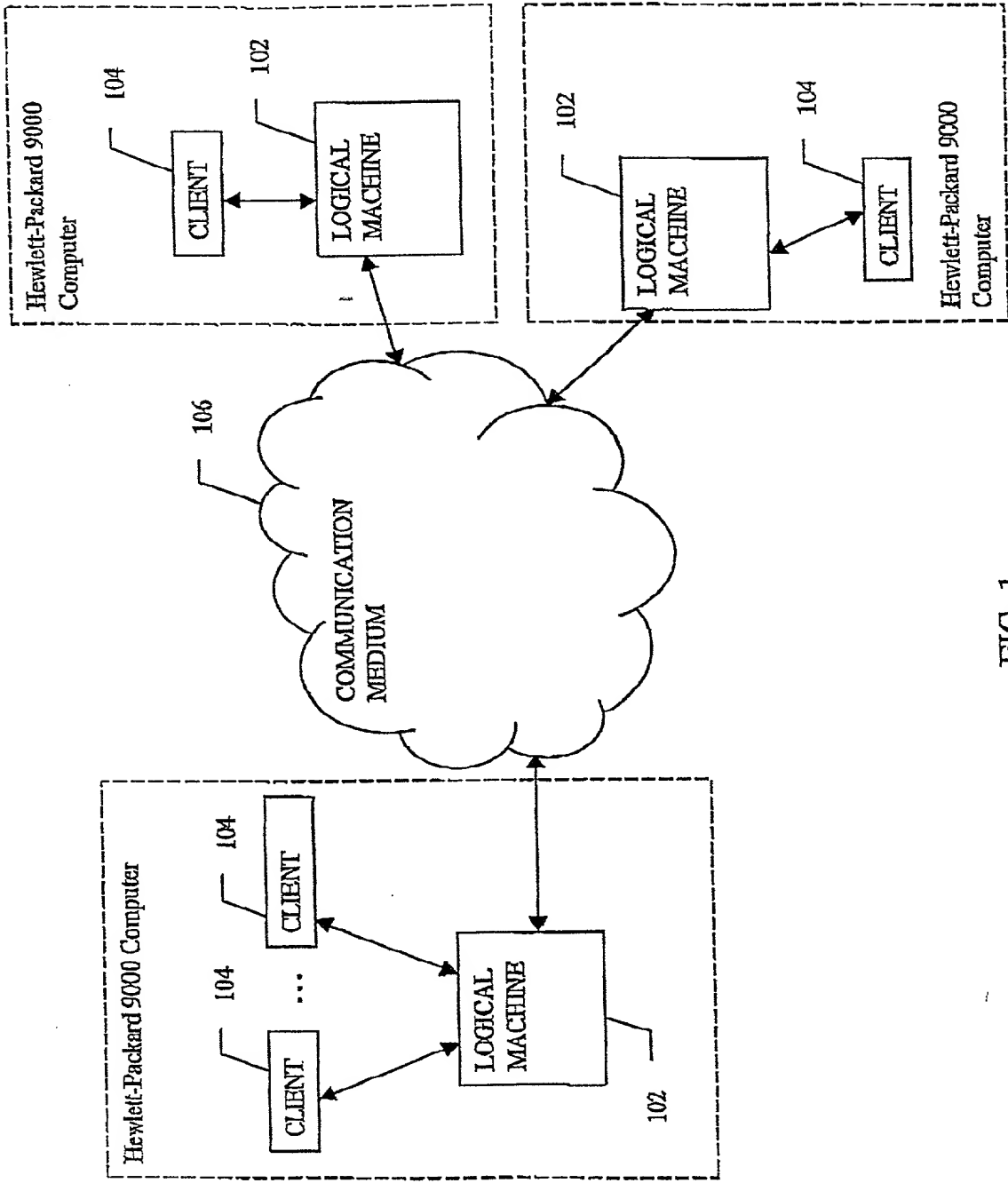


FIG. 1

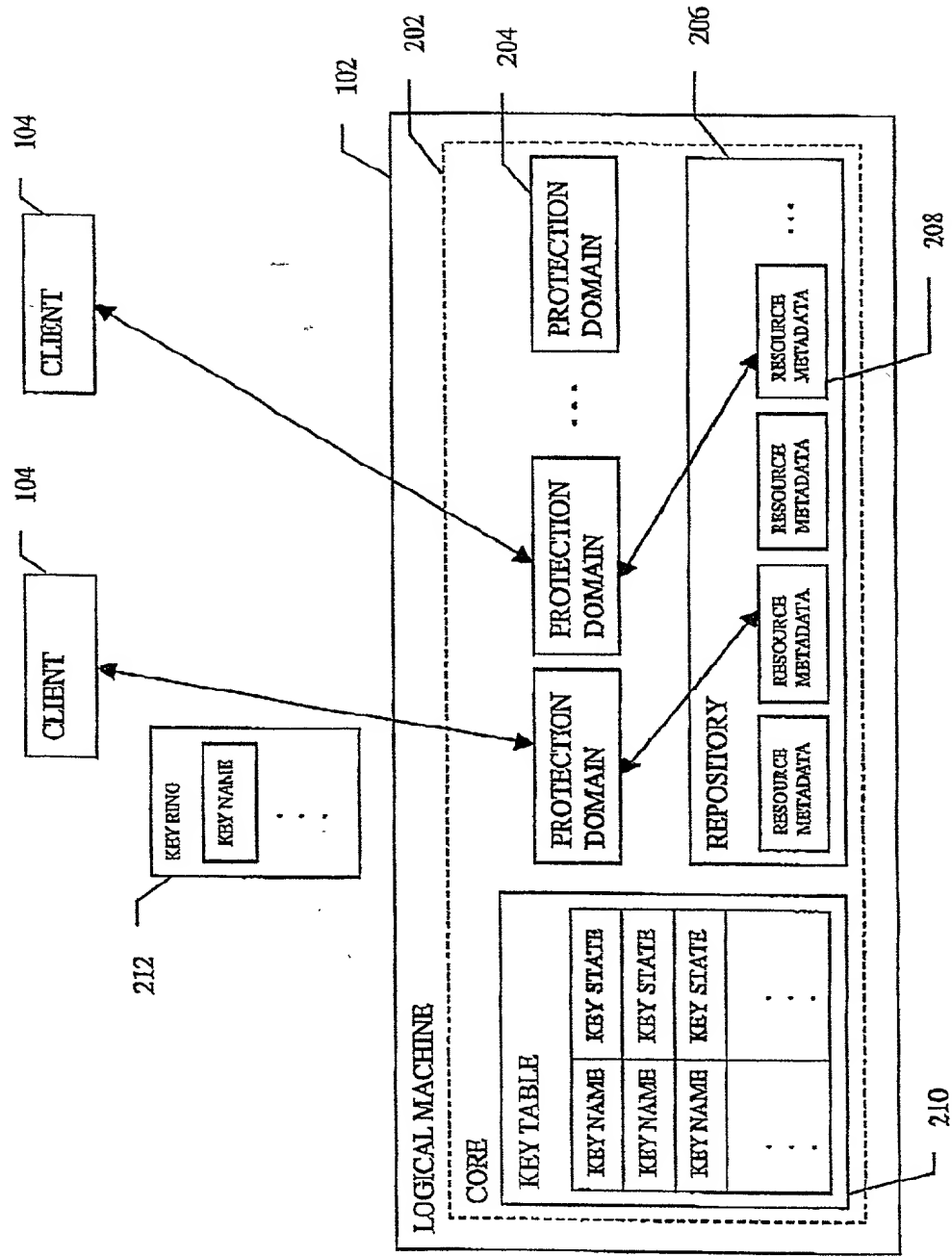


FIG. 2

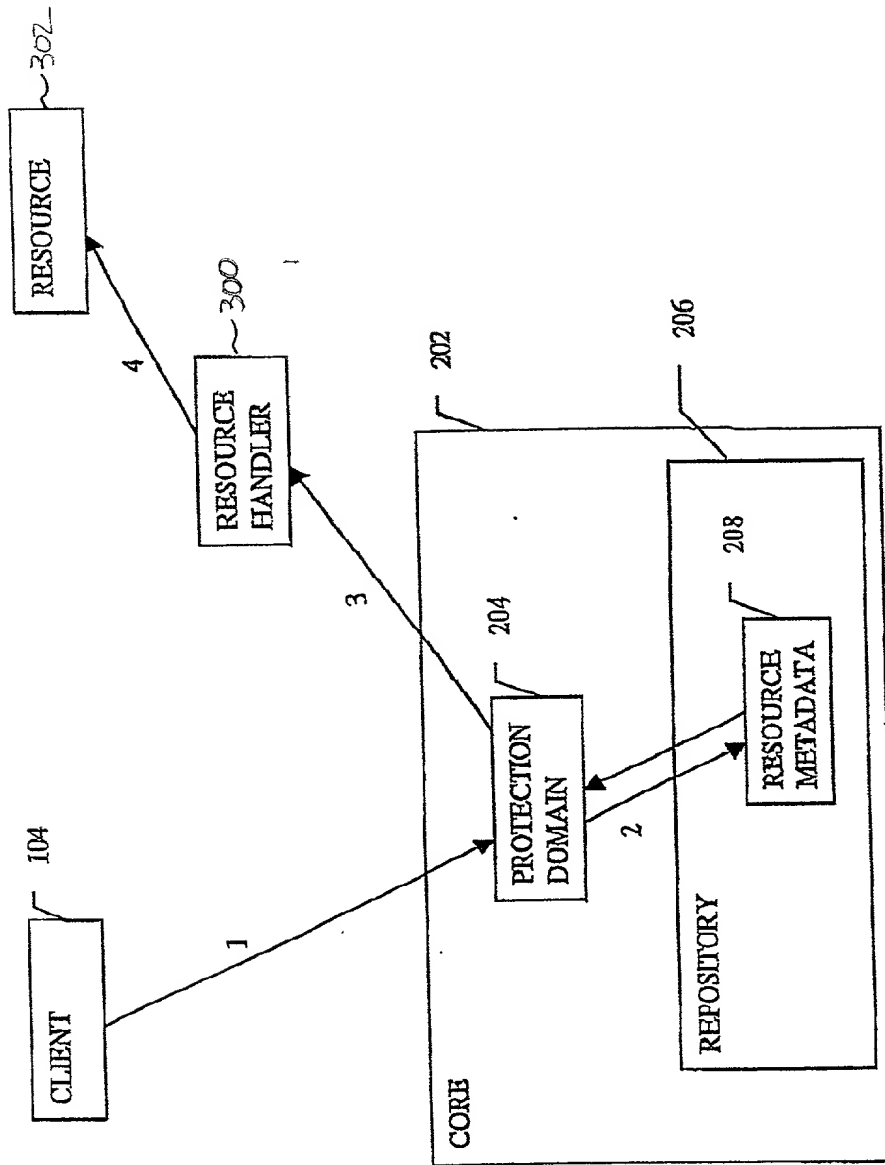


FIG. 3

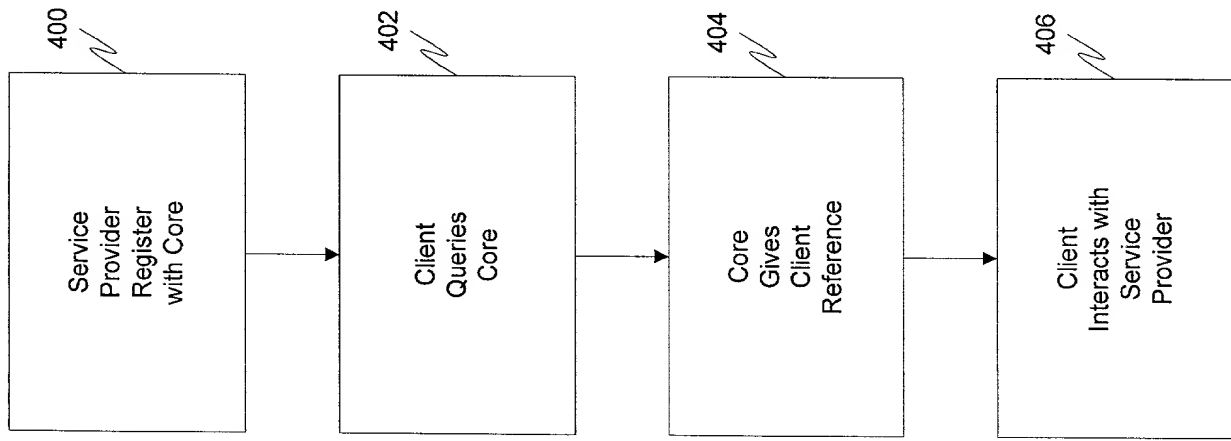


FIG. 4A

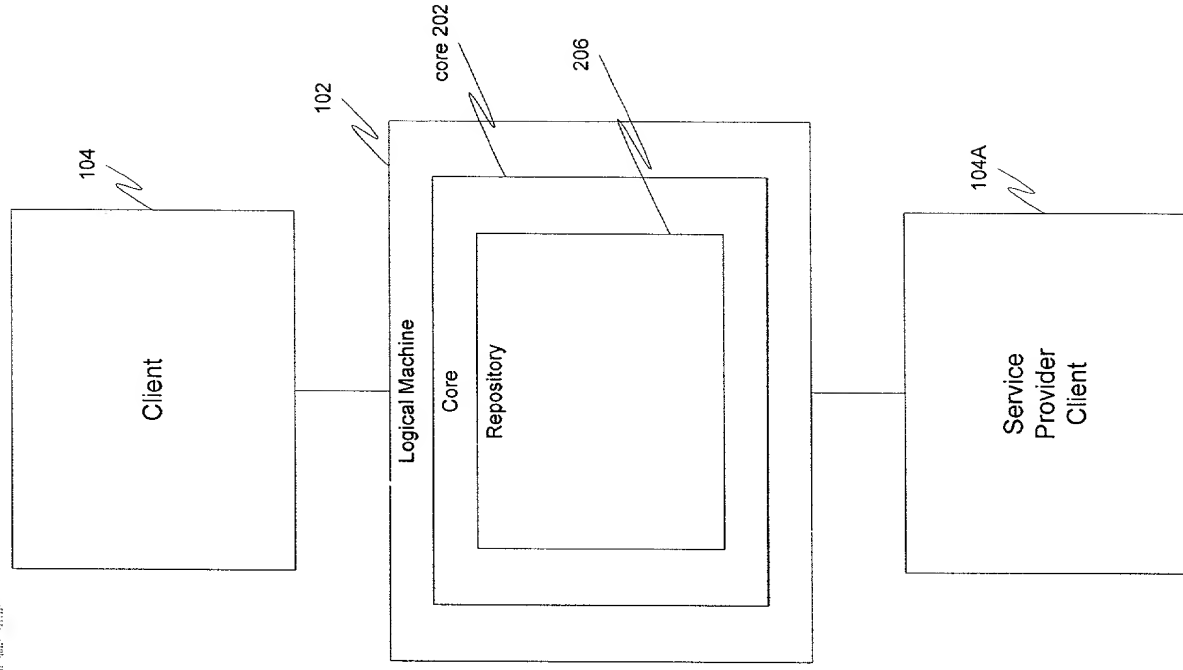


FIG. 4B

500
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502	Vocabulary	The definition of the attributes and their types used in descriptions and lookups
504	Resource Handler Mailbox	The process/thread/task that handles the Resource
506	Contract	Denotes the Application Programming Interface (API) supported by the provider, including version and similar information
508	Visibility and permissions	Access control information
510	Private Resource-specific data	Data important to the provider of the Resource, such as the provider's internal name for the Resource.
512	Public Resource-specific data	Data important to the user of the Resource, such as a stub for invoking methods.

FIG. 5

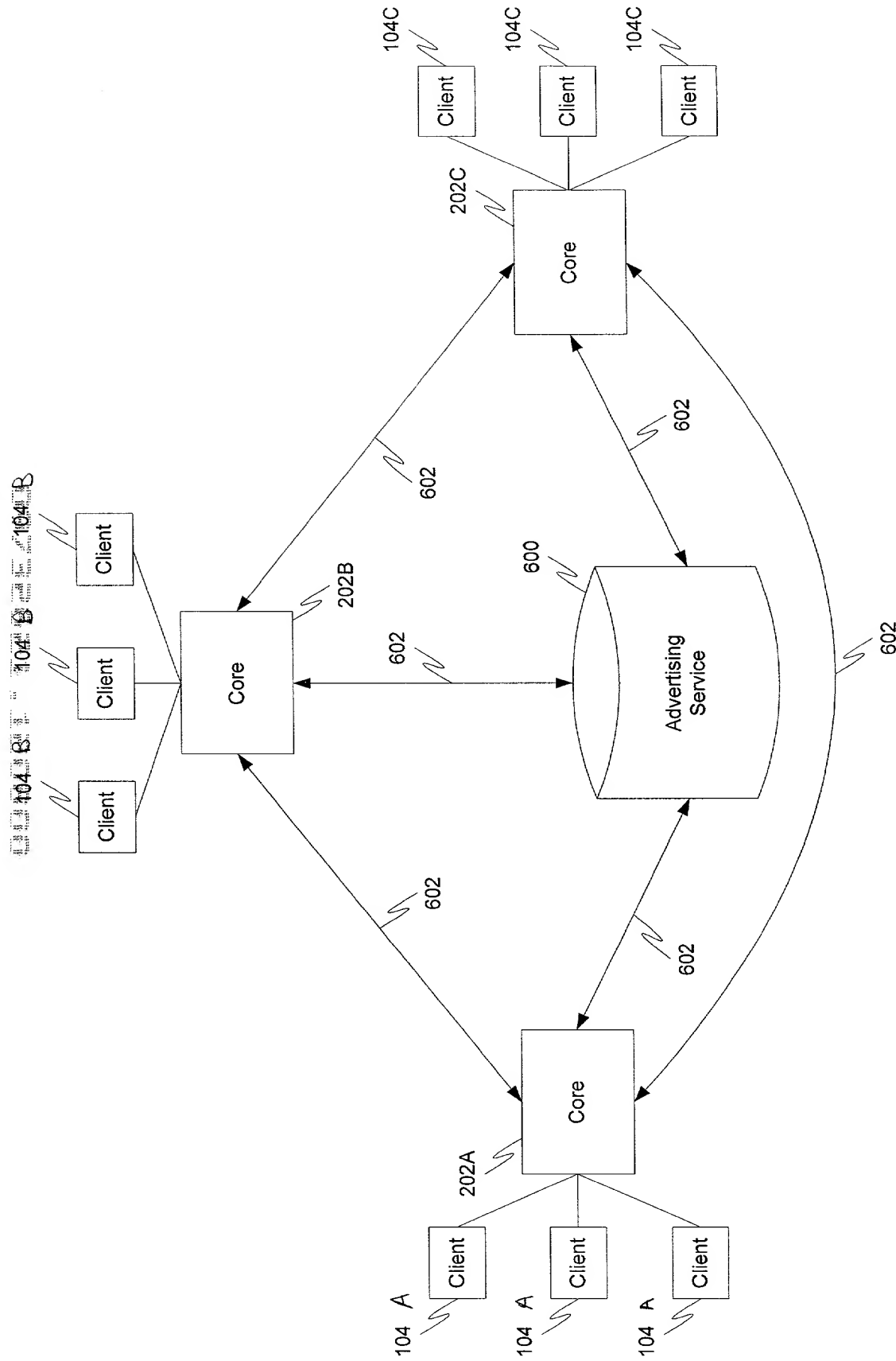


FIG. 6

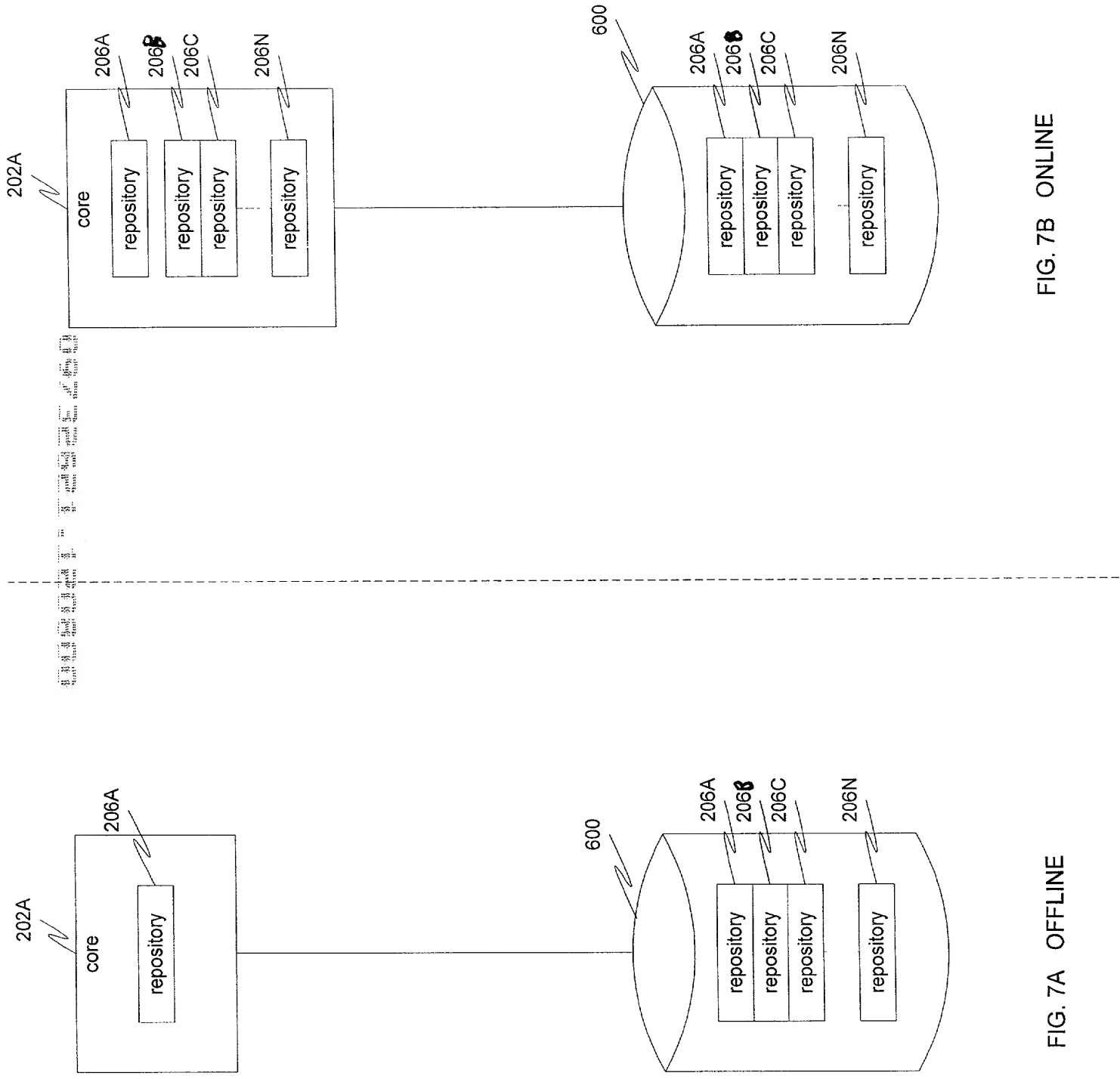


FIG. 7A OFFLINE

FIG. 7B ONLINE

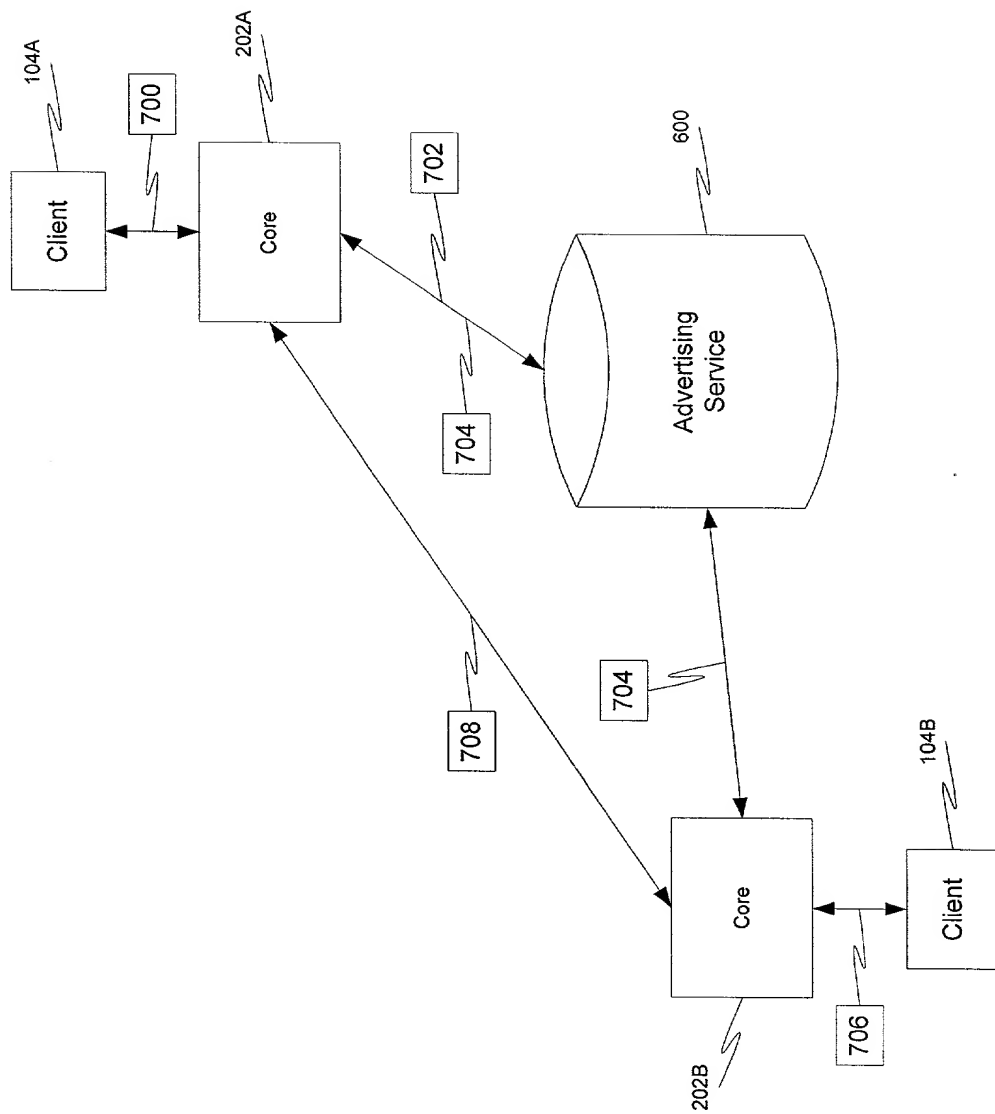


FIG. 8

FIG. 9A is a block diagram of a system architecture. The system includes a Client 104A, a Core 202A, a Well Known Portal 901, another Core 202B, another Client 104B, and two Advertising Services 600A and 600B. The Client 104A is connected to the Core 202A via a connection 900. The Core 202A is connected to the Well Known Portal 901 via a connection 904. The Well Known Portal 901 is connected to the Core 202B via a connection 903. The Core 202B is connected to the Client 104B via a connection 902. The Core 202A is also connected to the Advertising Service 600A via a connection 908. The Core 202B is connected to the Advertising Service 600B via a connection 904. The Advertising Service 600A is connected to the Core 202A via a connection 900. The Advertising Service 600B is connected to the Core 202B via a connection 902.

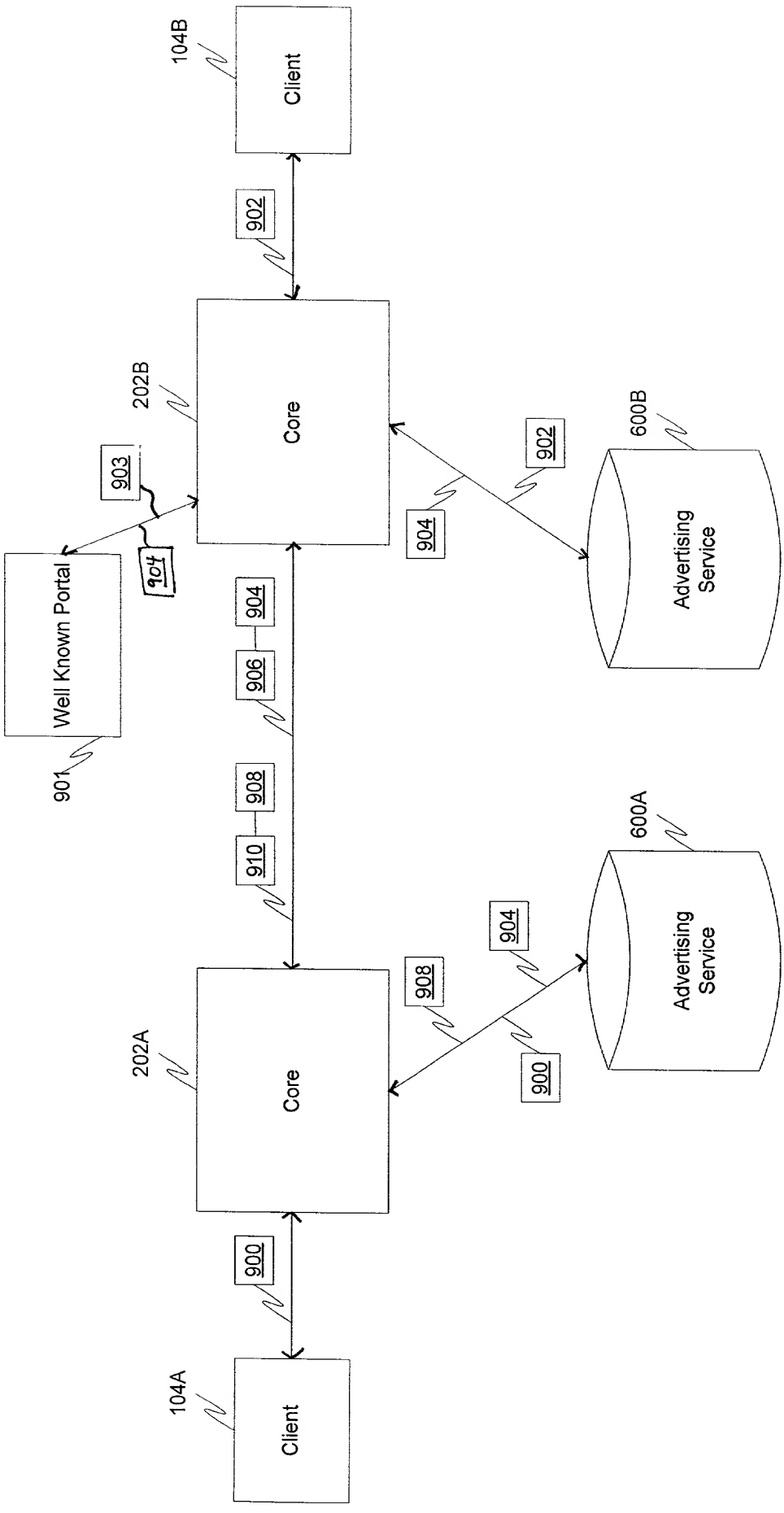


FIG. 9A

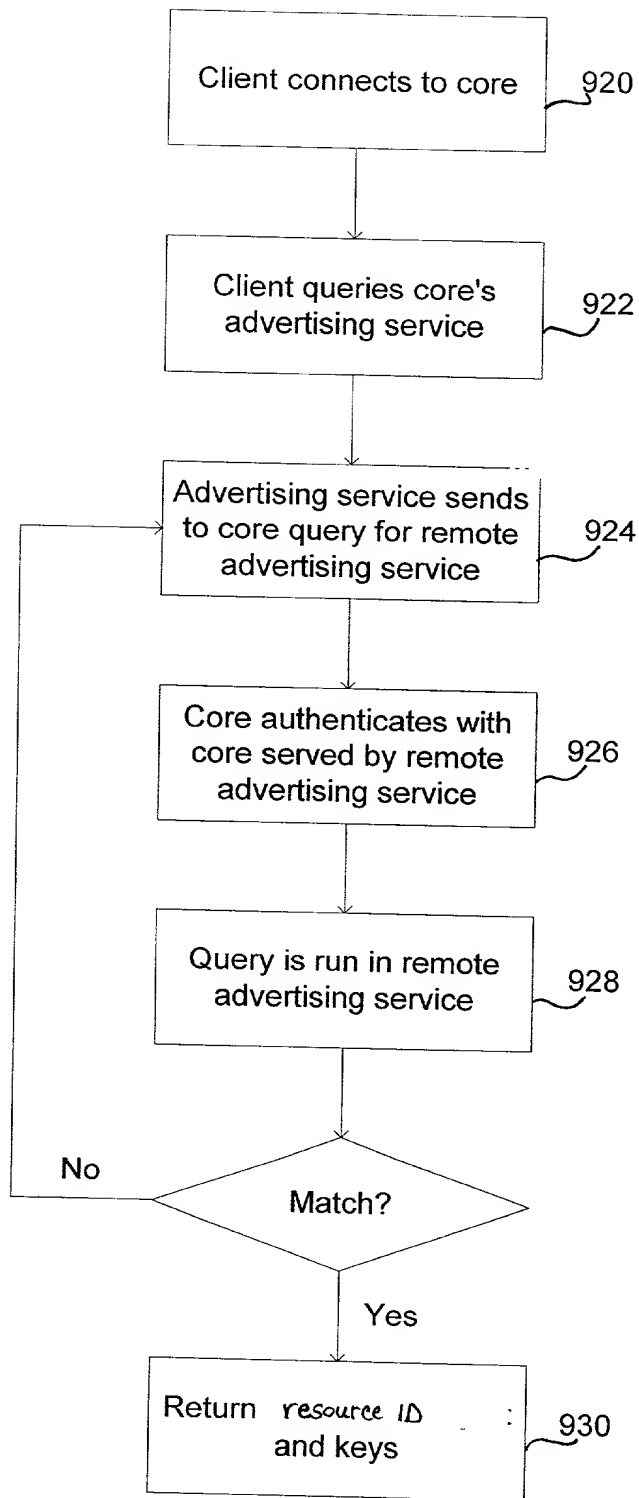


FIG. 9B

924

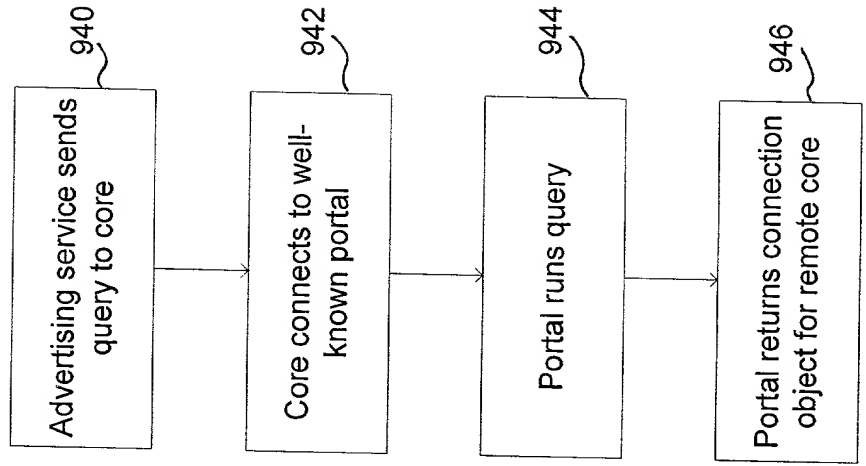


FIG. 9C